# CLAIMS

1. A session-state management method comprising:

generating an encoded session-state token, wherein the token incorporates a representation of session state of a client;

encrypting the encoded token using a one-way encryption scheme to produce an encrypted token; and

sending the encrypted token to the client.

2. A method as recited in claim 1, further comprising authenticating the user of the client.

3. A method as recited in claim 1, further comprising authenticating the user of the client, wherein the authenticating step comprises:

receiving a user identification indicator ("username") and a password;

comparing the username to a database of authorized user records, each record containing a username and a username-associated password;

comparing the password received in the receiving step to a username-associated password of a record containing a matching username; and

establishing a session for the user.

4. A method as recited in claim 1, wherein the generating step comprises forming a confirmation token that incorporates a representation of an incremental time block.

**5.**    A method as recited in claim 1, wherein the generating step comprises forming a confirmation token that incorporates a representation of a current incremental time block.

**6.**    A method as recited in claim 1, wherein the generating step comprises forming a confirmation token that incorporates a representation of an incremental time block that is prior a current incremental time block.

**7.**    A computer-readable storage medium having computer-executable instructions that, when executed by a computer, performs the method as recited in claim 1.

**8.**    A session-state management method comprising:

receiving a one-way encrypted, session-state token from a client, wherein the token incorporates a representation of session state of a client;

generating a one-way encrypted, confirmation session-state token;

comparing the confirmation token with the received token.

**9.**    A method as recited in claim 8, wherein the generating step comprises forming a confirmation token that incorporates a representation of an incremental time block.

10. A method as recited in claim 8, wherein the generating step comprises forming a confirmation token that incorporates a representation of a current incremental time block.

11. A method as recited in claim 8, wherein the generating step comprises forming a confirmation token that incorporates a representation of an incremental time block that is prior a current incremental time block.

12. A method as recited in claim 8, further comprising:

issuing a one-way encrypted, replacement session-state token;

sending the replacement token to the client.

13. A method as recited in claim 12, wherein the issuing step comprises forming a replacement token that incorporates a representation of a current incremental time block.

14. A method as recited in claim 8, wherein the generating step comprises forming a confirmation token that incorporates a representation of an incremental time block, if confirmation and received tokens fail to match, the method further comprising:

generating a new one-way encrypted, confirmation session-state token, wherein the confirmation token incorporates a representation of a previous incremental time block;

comparing the new confirmation token with the received token.

**15.** A method as recited in claim 14, wherein the new-confirmation-token generating step comprises forming a confirmation token that incorporates a representation of an incremental time block, if confirmation and received tokens fail to match, the method further comprising:

repeating the steps of new-confirmation-token generating and comparing the new and received tokens, wherein each subsequent reiteration of such steps employs a representation of a previous incremental time block that is previous a previous reiteration of the same steps, for a specified number of times or until compared tokens match.

**16.** A computer-readable storage medium having computer-executable instructions that, when executed by a computer, performs the method as recited in claim 8.

**17.** A session-state management method comprising:

(A) receiving a one-way encrypted, session-state token from a client;

(B) generating a one-way encrypted, confirmation session-state token, wherein the confirmation token incorporates a representation of a current incremental time block;

(C) comparing the confirmation token with the received token;

(D) if the confirmation token and the received token match,

(1) issuing a one-way encrypted, replacement session-state token, wherein the replacement token incorporates a representation of a current incremental time block;

(2) sending the replacement token to the client.

if the confirmation token and the received token fail to match,

(3) generating a new one-way encrypted, confirmation session-state token using the one-way encryption scheme of the encryption step, wherein the token incorporates a representation of a previous incremental time block;

(4) comparing the new confirmation token with the received token;

(5) if the new confirmation and received tokens fail to match, then further comprising:

(i) repeating the steps of new-confirmation-token generating and comparing the new and received tokens, wherein each subsequent reiteration of such steps employs a representation of a previous incremental time block that is previous a previous reiteration of the same steps, for a specified number of times;

(ii) if, during the repeating step, the confirmation token matches the received token,

(a) issuing a one-way encrypted, replacement session-state token, wherein the token incorporates a representation of a current incremental time block;

(b) sending the replacement token to the client.

18.    A computer-readable storage medium having computer-executable instructions that, when executed by a computer, performs the method as recited in claim 17.

**19.** A session-state management method comprising:

authenticating a user of a client to establish a session with the user;

generating an encoded session-state token, wherein the encoded token incorporates a representation of session-state of the user's session;

sending the session-state token to the client.

**20.** A method as recited in claim 19, wherein the authenticating step comprises:

receiving a user identification indicator ("username") and a password;

comparing the username to a database of authorized user records, each record containing a username and a username-associated password;

comparing the password received in the receiving step to a username-associated password of a record containing a matching username; and

establishing a session for the user.

**21.** A method as recited in claim 19, wherein:

the user is identified by a user identification indicator (UserID);

the generating step comprises forming a session-state token at least partially based upon the UserID.

**22.** A method as recited in claim 19, wherein:

a time block is identified by a time block identification indicator (TimeID);

the generating step comprises forming a session-state token at least partially based upon the TimeID.

**23.** A method as recited in claim 19, wherein:

the user is identified by a user identification indicator (UserID);

a time block is identified by a time block identification indicator (TimeID);

the generating step comprises forming a session-state token at least partially based upon the UserID and the TimeID.

**24.** A method as recited in claim 19, further comprising encrypting the encoded token between the generating and the sending steps.

**25.** A method as recited in claim 19, further comprising one-way encrypting the encoded token between the generating and the sending steps

**26.** A method as recited in claim 19, wherein:

the user is identified by a user identification indicator (UserID);

a time block is identified by a time block identification indicator (TimeID);

the generating step comprises combining UserID and TimeID to produce an encoded token.

**27.** A computer-readable storage medium having computer-executable instructions that, when executed by a computer, performs the method as recited in claim 19.

**28.** A session-state token generation method, wherein an authenticated user is identified by a user identification indicator (UserID) and a time block identification indicator (TimeID) identifies a specific time block, the method comprising:

combining UserID and TimeID to produce an encoded token;

encrypting the encoded token.

**29.** A method as recited in claim 28, wherein the combining step comprises concatenating UserID and TimeID.

**30.** A method as recited in claim 28, wherein the combining step comprises concatenating UserID, TimeID, and a code key.

**31.** A method as recited in claim 28, wherein the encrypting steps comprises encrypting the encoded token using a one-way encryption scheme.

**32.** A method as recited in claim 28, wherein the encrypting steps comprises:

encrypting the encoded token using a one-way encryption scheme to produce an encrypted result; and

selecting a defined portion of the encrypted result to form a session-state token.

33.    A computer-readable storage medium having computer-executable instructions that, when executed by a computer, performs the method as recited in claim 28.

34.    A session-state management method comprising:

receiving a user-associated, encoded session-state token from a client, wherein the encoded token incorporates a representation of session-state of the user's session;

generating an encoded, confirmation session-state token;

comparing the received token with the confirmation token.

35.    A method as recited in claim 34, wherein the generating step comprises forming a confirmation token that incorporates a representation of a current incremental time block, if confirmation and received tokens fail to match, further comprising:

generating a new confirmation token using a representation of a incremental time block previous of the time block representation used for the previous generating step;

comparing the new confirmation token with the received token.

**36.** A method as recited in claim 35, if confirmation and received tokens fail to match, further comprising:

repeating the steps of generating a new confirmation token and comparing the new and received tokens, wherein each subsequent reiteration of these steps uses a representation of a previous incremental time block that is previous a previous reiteration of the same steps, for a specified number of times or until compared tokens match.

**37.** A method as recited in claim 34, wherein the user-associated session-state token is encrypted.

**38.** A method as recited in claim 34, wherein the user-associated session-state token is one-way encrypted.

**39.** A computer-readable storage medium having computer-executable instructions that, when executed by a computer, performs the method as recited in claim 34.

**40.** A session-state management method comprising:

receiving a user-associated TimeID from a client, wherein the encoded token incorporates a representation of session-state of the user's session;

designating a first time block identification indicator (TimeID) for a first time block;

comparing the user-associated TimeID with the first TimeID.

**41.** The method of claim 40, further comprising:

designating a prior TimeID for a time block prior to the first time block;

comparing the user-associated TimeID with the prior TimeID.

**42.** A server to communicate with a client over a communications network, the server comprising:

a processor;

a session-state manager executable on the processor to:

generate a session-state token, wherein the token incorporates a representation of session state of the client;

encrypt the token using a one-way encryption scheme to produce an encrypted token; and

send the encrypted token to the client.

**43.** A server to communicate with a client over a communications network, the server comprising:

a processor;

a session-state manager executable on the processor to:

receive a one-way encrypted, session-state token from the client, wherein the token incorporates a representation of session state of a client;

generate a one-way encrypted, confirmation session-state token;

compare the confirmation token and the received token.

**44.** A server to communicate with a client over a communications network, the server comprising:

a processor;

a session-state manager executable on the processor to:

authenticate a user of the client;

generate an encoded session-state token, wherein the token incorporates a representation of session state of the client; and

send the session-state token to the client.

**45.** A manager as recited in claim 44, wherein session-state manager executable on the processor to encrypt the encoded session-state token.

**46.** A manager as recited in claim 44, wherein session-state manager executable on the processor to one-way encrypt the encoded session-state token.

**47.** A server to communicate with a client over a communications network, wherein an authenticated user is identified by a user identification indicator (UserID) and a time block identification indicator (TimeID) identifies a specific time block, the server comprising:

a processor;

a session-state manager executable on the processor to:

combine UserID and TimeID to produce a encoded token; and

encrypt the encoded token.

**48.** A server to communicate with a client over a communications network, the server comprising:

a processor;

a session-state manager executable on the processor to:

receive a user-associated, encoded session-state token from the client;

generate an encoded, confirmation session-state token, wherein the confirmation token incorporates a representation of session state of the client;

compare the received token with the confirmation token.

**49.** A computer-readable storage medium having computer-executable instructions that, when executed by a computer, performs the method comprising:

generating an encoded session-state token, wherein the token incorporates a representation of session state of a client;

encrypting the encoded token using a one-way encryption scheme;

sending the encrypted token to the client.

**50.** A computer-readable storage medium having computer-executable instructions that, when executed by a computer, performs the method comprising:

receiving a one-way encrypted, session-state token from a client, wherein the token incorporates a representation of session state of a client;

generating a one-way encrypted, confirmation session-state token;

comparing the confirmation token with the received token.